Pollution Prevention Technology Diffusion Initiative

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The Advantages of P2 Technologies

- Waste Reduction
- Cost Savings
- Improved Compliance
- Improved Safety
- Improved Efficiency

TDI Primary Goals

- Document barriers to implementation or adoption of proven innovative P2 technologies
- Determine how barriers can be overcome
- Build capabilities with key technologies in selected sectors

Diffusion of P2 Technologies is Slow

The 5 major factors affecting adoption are:

1) Perceived advantages inadequate or uncertain
2) Perceived incompatabilities with current processes & operations
3) Perceived complexities of new technology
4) Inability to observe technology in operations
5) Lack of time and money to conduct a pilot test

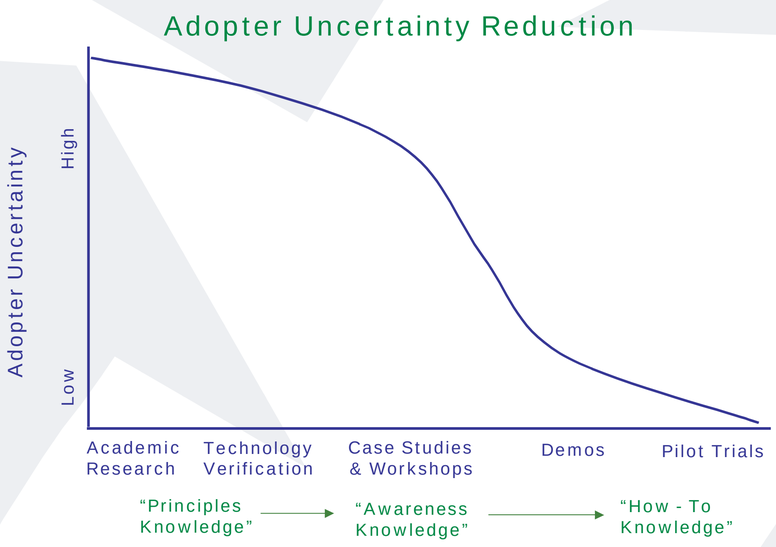
Initiative Provides:

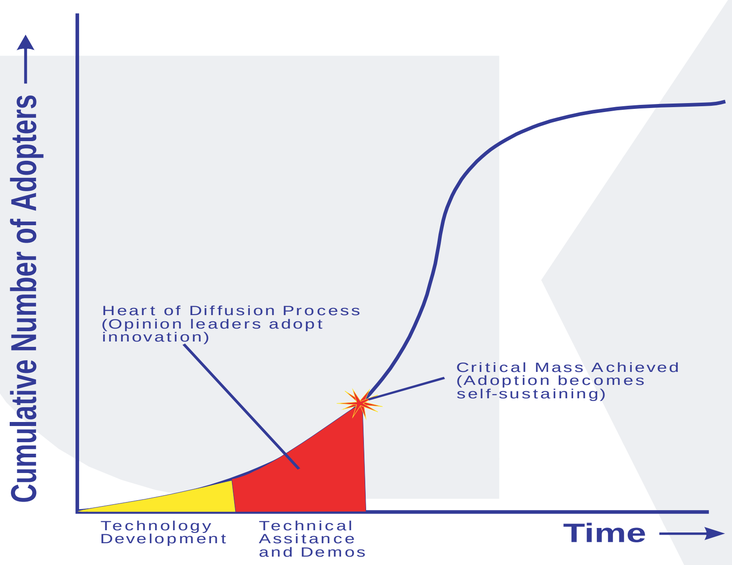
- Demonstrations and pilot trials of innovative technologies
- Technical assistance demonstrating "how-to" implement P2 practices
- Training, information resources, and technical assistance to consultants, trade associations, POTWs, agencies, vendors, and businesses
- R & D of cutting edge technologies to establish P2 technical principles

Results/Summary To This Point

Pilot trials reduce uncertainty

- Resolve compatibility issues
- Reduce perceived complexity
- Accelerate implementation of new technologies





Regional Initiative to Promote P2 Technology Diffusion

3-State initiative participants and targeted sectors

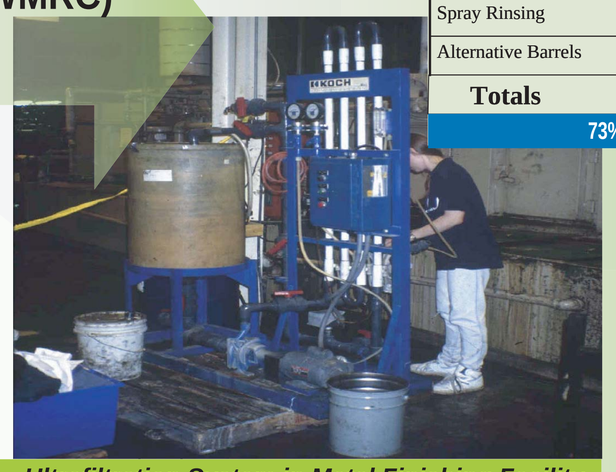
Illinois Waste Management and Research Center (WMRC)

Metal Finishing
Printed Wiring Board

Metal Finishing Technology Implementation

Technology	Pilots	Implemented	Rejected	Evaluating
Conductivity Control	5	4	1	
Energy Innovations	4	4		
Ultrafiltration	2	1		1
Water purification/reuse	1			1
Microbe Cleaners	1	1		
Spray Rinsing	1			1
Alternative Barrels	1	1		
Totals	**15**	11	1	2

73% Implementation Rate to date



Ultrafiltration System in Metal Finishing Facility

Wood Technology Implementation Summary Minnesota Technical Assistance Program (MNTAP)

Technology	Demos	Pilots	Implementation	Rejected	Evaluating
Powder Coating on mdf*	11	1	2*	2	2
Waterborne Coatings	0	1			1
UV Curable Coatings	3	2			3
Point-of-Use Mixing Equipment	0				

Mdf = medium density fiberboard
Note: 2 facilities were already using powder on mdf –one was a demo site and the other a presenter at Powder Demo

Minnesota Technical Assistance Program (MNTAP)

Wood Finishing
Fiber Reinforced Plastics

Powder Coating Wood Demonstrations

Achieved 33% Reduction in H_20 Consumption

Kentucky Pollution Prevention Center (KPPC)

Metal Finishing
Fiber Reinforced Plastics

Conductivity Control System